

WHAT IS CLAIMED IS:

1. A method for exchanging multicall capabilities between user equipment and a network in a radiocommunication system comprising the steps of:

5 transmitting, from said user equipment to said network, multicall capability information associated with said user equipment;

calculating, in said network, multicall limit information based on said multicall information associated with said user equipment and multicall information associated with said network; and

10 returning, to said user equipment, said multicall limit information.

2. The method of claim 1, wherein said network includes a mobile switching center (MSC) and a radio network controller (RNC), each of which perform functions associated with radiocommunication support of said user equipment, said method further

15 comprising the steps of:

determining multicall capability information associated with said RNC;

and

using said multicall capability information associated with said RNC to calculate said multicall limit information.

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3. The method of claim 2, wherein said step of transmitting further comprises the step of:

transmitting an indication of a maximum number of bearers supported by said user terminal.

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4. The method of claim 2, wherein said step of transmitting further comprises the step of:

transmitting a value associated with at least one parameter from which a maximum number of bearers supported by said user terminal can be determined.

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5. The method of claim 2, further comprising the step of:
transmitting said multicall capability information associated with said
RNC for storage in an RNC limits storage unit.

5 6. The method of claim 5, wherein said RNC storage unit is co-located with
said MSC.

3 7. The method of claim 1, further comprising the step of:
storing said multicall limit information in a storage unit within said user
10 equipment.

8. The method of claim 1, further comprising the step of:
storing said multicall limit information in a storage unit within said
network.

15 9. The method of claim 1, wherein said step of transmitting further comprise
the step of:
transmitting said multicall capability information after the transmission of
a location updating request message.

20 10. The method of claim 1, wherein said step of transmitting further
comprise the step of:
transmitting said multicall capability information as part of the
transmission of a location updating request message.

25 11. The method of claim 10, wherein said multicall capability information is
included as an extension of a CLASSMARK 2 information element in said location
updating request message.

12. The method of claim 1, wherein said step of returning further comprises
the step of:
accept message.

13. The method of claim 1, wherein said step of returning further comprises
the step of:
transmitting a message including said multicall limit information to said
user equipment that is independent of a location update accept message.

10 14. A method for informing a mobile switching center (MSC) of multicall
capabilities associated with a radio network controller (RNC) in a radiocommunication
system comprising the step of:
transmitting, from said RNC to said MSC, an indication of said multicall
15 capabilities associated with said RNC.

20 15. The method of claim 14, wherein said step of transmitting is triggered by
at least one of: a software update, a hardware update, a start, a restart and a change of
operator settings.

25 16. The method of claim 14, wherein said indication of said multicall
capabilities is an indication of a maximum number of bearers supported by said RNC.

17. A method for informing a mobile switching center (MSC) of multicall
capabilities associated with user equipment in a radiocommunication system comprising
the step of:
determining that a change in said multicall capabilities has occurred in
said user equipment; and

30 transmitting, from said user equipment to said MSC, a current indication
of said multicall capabilities associated with user equipment.

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18. The method of claim 17, wherein said change in multicall capabilities is a result of a change in user settings.

19. The method of claim 17, wherein said indication of said multicall capabilities is an indication of a maximum number of bearers supported by said user equipment.

20. A terminal comprising:
a storage unit for storing a maximum number of bearers which are currently usable by said terminal;
a counter for counting a number of said bearers which are currently being used by said terminal; and
a control unit, connected to said storage unit and said counter, for selectively processing a call based upon said maximum number of bearers and said number of bearers which are currently being used.

21. The terminal of claim 20, wherein said control unit selectively places an ongoing speech call on hold based upon said maximum number of bearers and said number of bearers which are currently being used.

22. The terminal of claim 20, wherein said control unit selectively requests a bearer and increments said counter based upon said maximum number of bearers and said number of bearers which are currently being used.

23. The terminal of claim 20, wherein said control unit selectively denies a call request based upon said maximum number of bearers and said number of bearers which are currently being used.

24. A method for processing a user's call request at user equipment when a bearer is available for said call comprising the steps of:

determining whether the call request is for a speech call;

if so, and if another speech call is currently ongoing, implicitly placing

5 said ongoing speech call on hold and using a bearer associated with said ongoing speech call to handle said call request; and

otherwise, if the call request is not for a speech call or if another speech call is not ongoing, request a bearer to support said user's call request.

10 25. The method of claim 24, wherein, if said bearer is requested to support said user's call request, performing the step of:

incrementing a counter in said user equipment.

26. A method for processing a user's call request when a bearer is not

15 available for ~~said user's equipment~~ comprising the steps of:

determining if a speech call is ongoing to said user's equipment;

if so, placing said ongoing speech call on hold and allocating a bearer

associated with said ongoing speech call to support said user's call request; and

otherwise, if a speech call is not ongoing, denying said user's call

20 request.

27. A mobile switching center usable in radiocommunication systems comprising:

a storage unit for storing a maximum number of bearers which can be

25 used to support communications with a user equipment;

a counter to count a number of bearers currently being used to support communications with said user equipment; and

a control unit, connected to said storage unit and to said counter, to

process an incoming call for said user equipment based on values stored in said storage

30 unit and said counter.

28. The mobile switching center of claim 27, wherein said control unit selectively sets up said incoming call depending upon, at least in part, whether a bearer is available for said user equipment.

5 29. The mobile switching center of claim 27, wherein said control unit selectively sets up said incoming call depending upon, at least in part, whether said user equipment is associated with a subscription for which a call waiting feature is enabled.

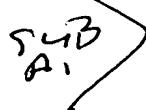
10 30. A method for processing an incoming call directed to user equipment for which an unused bearer is available in a radiocommunication system comprising the steps of:

bearer
15 feature; and
if so, determining if said user equipment has subscribed to a call waiting
bearer to set up said incoming call.
if so, determining if said incoming call is a speech call;
if so, determining if another speech call is ongoing using another radio
if so, invoking call hold for said ongoing call and using said another radio

20 31. The method of claim 30, further comprising the step of:
if it is determined that said user equipment has not subscribed to said call
waiting feature, denying said incoming call.

25 32. The method of claim 30, wherein if said incoming call is not a speech call or if an ongoing speech call does not exist, then setting up said incoming call using said unused bearer.

33. A computer program for implementing the method of claim 1 in a node of a radiocommunication system.



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A computer program for performing the method of claim 17 in user

equipment.